

## **ROUTE 108 PUMP STATION AND INTERCEPTOR ODOR STUDY AND PILOT TESTING HOWARD COUNTY, MD**

### **FINAL PROJECT SCORECARD**

- Odor causes identified**
- Odor control systems were pilot tested**
- Oxygen injection was recommended**
- Pressure Swing adsorption (PSA) for oxygen generation on-site selected**

**WEA** performed an odor study and odor control system pilot testing for the Route 108 pump station and Tiber Branch/Catrock Interceptor in Howard County, MD in 2001 and 2002 for WR&A. The interceptor receives flow from the Route 108 PS and is routed through the historic district of Ellicott City, MD. Numerous odor complaints had occurred when the PS was in service. The study included odor sampling and testing and wastewater testing to determine the major causes of the odors. Pilot testing of several odor control alternatives (nitrates and pure oxygen) and sewer exhaust testing were completed to evaluate chemical injection and air treatment technologies for mitigating the odor problems. A cost effective analysis of each alternative with on on-site pressure swing adsorption system. As a result of the study, WEA is assisting in the design of an oxygen injection system and several carbon adsorber systems.



**Route 108 PS and pilot chemical storage tank**

**Pure oxygen injection recommended**

